

8429

Diag. Cht. No. 1257-2.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. S0-2358 Office No. H-8429

LOCALITY

State Florida

General locality West Coast

Locality North Tampa Bay

1958

CHIEF OF PARTY

J. B. Watkins, Jr.

R. C. Darling

LIBRARY & ARCHIVES

DATE January 11, 1961

USCOMM-DC 5087

8429

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

REGISTER No. H-8429

Field No. 80-2358

State FLORIDA

General locality WEST COAST OF FLORIDA

Locality TAMPA BAY, WEST

Scale 1:20,000 Date of survey 1958

Instructions dated 13 February 1957

Vessel SHIP SOSBEE and EAST COAST FIELD PARTY

Chief of party William D. Barbee, John B. Watkins, Jr., Miller J. Tonkel
R.C. Darling

Surveyed by J.B.W., E.R.S., B.S.W., J.J.M., R.L., M.G. *A.M. Cook*
J.B. Watkins, B.S. Woodruff

Soundings taken by ~~tachometer~~, graphic recorder, ~~and barometer~~

Fathograms scaled by Personnel, Ship SOSBEE & East Coast Field Party

Fathograms checked by Personnel, Ship SOSBEE & East Coast Field Party

Protracted by A.G. Atwill (Norfolk Processing Office)

Soundings penciled by A.G. Atwill " " "

Soundings in ~~tachometer~~ feet at MLW ~~XXXX~~ *and are true depths*

REMARKS: All corrections and reduced soundings have been entered and checked by personnel of the Ship SOSBEE and the East Coast Field Party.

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SURVEY NO. H-8429 (Field No. SO-2358)
WEST COAST OF FLORIDA 23 Apr. 1958 to 12 Sept. 1958
TAMPA BAY, WEST SCALE 1:20,000
USC&GS Ship SOSBEE William D. Barbee & John B. Watkins
East Coast Field Party Robert C. Darling

A. PROJECT

The authority for this survey is contained in Instructions dated 13 February 1957 for Project CS-402.

B. SURVEY LIMITS AND DATES

This survey covers the western part of Tampa Bay from Latitude 27° 38' N. to Latitude 27° 48.6' N. and from Longitude 82° 30' W. to Longitude 82° 38.2' W. (See attachments Z - 2 g; index of Hydrographic Sheets).

Field work was begun on 23 April 1958 and ended on 12 Sept. 1958. *This is combined period of time for both parties. The work in the vicinity of the channels & spoil areas was accomplished April - May of 1958. Skiff work only was accomplished in Aug - Sept of 1958.*

The survey makes a junction with prior survey H-7970, scale 1:10,000, 1952.

The survey makes a junction with ⁽¹⁹⁵⁷⁻⁵⁸⁾ contemporary ⁽¹⁹⁵⁸⁾ surveys: ⁽¹⁹⁵⁸⁾ H-8428, 1:10,000 to the southwest; H-8411 and H-8430 both 1:10,000, to the east; ECFP-1158 and 1258, both 1:10,000, to the north and west. H-8425 ⁽¹⁹⁵⁸⁾ H-8426 ⁽¹⁹⁵⁸⁾

Unsatisfactory progress of the field work is explained in the East Coast Field Party Supplementary Descriptive Report (attachment Z-2h), and the Shoran Report, Ship SOSBEE, which was submitted under separate cover.

C. VESSEL AND EQUIPMENT

The vessels used ^{for} the survey were the USC&GS Ship SOSBEE, Skiff No. 735 and East Coast Field Party Launch No. CS-183. The Ship SOSBEE and the East Coast Field Party Launch CS-183 were used for all shoran-controlled hydrography and Skiff No. 735 was used for all soundings made in shoal water. All vessels were based at the Central Yacht Basin, St. Petersburg, Florida.

C. VESSEL AND EQUIPMENT(Continued)

The shoran equipment used is listed in the SHORAN REPORT, Ship SOSBEE 1958 and the SUPPLEMENTARY DESCRIPTIVE REPORT SO-2358 attached to this report in Section Z-2h.

The SOSBEE has a speed of $8\frac{1}{2}$ knots and a turning radius of 110 meters.

Skiff No. 735 has a speed of 5 knots and a turning radius of 20 meters.

East Coast Field Party Launch CS-183 information is contained in the SUPPLEMENTARY DESCRIPTIVE REPORT, SO-2358 attached to this report in Section Z-2h.

The echo-sounders used were:

TYPE	NUMBER	GENERAL AREA USED
EDO 255 - - - -	209 - - - - -	Over 10 feet
808J - - - -	140-SP - - - - -	Under 10 feet

The echo-sounder used by the East Coast Field Party is described in the SUPPLEMENTARY DESCRIPTIVE REPORT, SO-2358 attached to this report in Section Z-2h.

D. TIDES AND CURRENTS

A portable automatic tide gage located at Pinellas Point, St. Petersburg, Fla. was used to reduce all soundings on the work performed by the Ship SOSBEE. *96.*

The tide gages used by the East Coast Field Party are noted in the SUPPLEMENTARY DESCRIPTIVE REPORT, SO-2358 attached to this report in Section Z-2h.

The plane of reference for the Pinellas Point Tide Gage corresponds to 1.5 feet on the tide staff. *for complete information see form 712 attached.*

There were no current stations within the limits of this survey.

E. SMOOTH SHEET

The smooth sheet is to be plotted by the Norfolk Processing Office.

F. CONTROL STATIONS

Triangulation stations, photo-hydro stations and shoran stations were used to control the hydrography. The shoran stations were located by existing triangulation stations. Their descriptions are included in the SHORAN REPORT, Ship SOSBEE 1958 which is submitted under separate cover. The geographic positions of the shoran stations are given in the list of signals attached.

F. CONTROL STATIONS (Continued)

The photo-hydro signals were taken from photogrammetric manuscripts furnished by the Tampa District Office. See Section G below.

Examination of the boat sheet while writing the descriptive report revealed that the Tampa Bay Cut "E" Channel Range Lt. 1957 was misplotted and all fixes that contained signal "Oil" are in error. A note has been made of this on the boat sheet. This involved a small area of visual hydrography in the southeast corner of the sheet. *Smooth sheet positions adequate.*

G. SHORELINE AND TOPOGRAPHY

reviewed The shoreline for this survey was taken from the following photogrammetric manuscripts: T-10554; T-10558; T-10560; T-10561; T-10562 and T-10565. All photography manuscripts and ozalids have been submitted to the Norfolk Processing Office under separate cover.

See review

The transfer of the topographic details are verified by the chief of party.

H. SOUNDINGS

The type of echo-sounders used in this survey are listed in Section C of this report. In areas of extensive shoal flats where the echo sounder would not record, a 10-foot pole, graduated in feet, was used. The method of sounding is indicated in the sounding volumes.

Soundings were corrected for index, velocity (bar check), phase, settlement and squat, and tide as applicable. All corrections and reduced soundings have been entered and checked by the field force prior to submission to the Norfolk Processing Office.

I. CONTROL OF HYDROGRAPHY

About 90 percent of the hydrography was controlled by shoran. The remainder was controlled by three-point sextant fixes. In a few minor instances, positions were estimated from shoreline details. These positions are marked "SBS" (see boat sheet) in the volumes.

Adjustments made to the shoran controlled hydrography are noted in the SHORAN REPORT, Ship SOSBEE 1958.

J. ADEQUACY OF SURVEY *See Review.*

This survey is considered complete and adequate, except that additional information from the U. S. Corps of Engineers surveys of Tampa Bay Cut B; Cut C; Cut D; Cut E; Cut F; Cut G; and Cut J Channels should be added. Descriptive Reports for H-8427 and H-8428 should be checked for the complete U. S. *See Review* Corps of Engineers survey. The Engineer's work was being carried on simultaneously with this survey. Copies of their most recent after dredging surveys are attached as a part of this report.

J. ADEQUACY OF SURVEY (Continued)

A cloth tracing overlay was made of this boat sheet, and hydrographic parties, one SOSBEE and one East Coast Field Party, worked simultaneously on the survey. The SOSBEE work on the tracing was transferred to the original boat sheet by placing the tracing over the boat sheet and pricking the positions through. The transferred soundings and the soundings on the boat sheet did not match at several different locations, especially along the ship channels. These discrepancies appear to result from distortion of the tracing and shore control differences. It is believed that these discrepancies will be resolved in smooth plotting.

The junctions with contemporary surveys H-8428, H-8411, H-8430 and the two East Coast Field Party sheets are satisfactory. No holidays or excessive differences exist. The depth curves can be adequately drawn at the junctions. *See Review.*

K. CROSSLINES

Crosslines constitute about 6 percent of the total hydrography. Crossings are in good agreement, except as noted in Section J of this report.

L. COMPARISON WITH PRIOR SURVEYS *See Review*

Comparison was made with the following prior surveys:

H-4584 - 1:20,000 and 1:30,000 - 1925, 1926

H-7970 - 1:10,000 - 1952 (junction)

FE 1-1955

H-4565 - 1:20,000 - 1926

H-4563 - 1:20,000 - 1926

The agreement was good. Specific comments follow:

1. *See Review.* The main ship channel has been improved by the U. S. Corp of Engineers, copies of the most recent after-dredging surveys are attached in Section Z-2f of this report. New spoil banks along the edges of the main ship channel are shown on the U. S. Engineer survey.
2. A sunken dredge with mast and stacks bare was located at latitude $27^{\circ} 45.3' N.$, longitude $82^{\circ} 31.2' W.$
3. *See Addendum* The piles at Lat. $27^{\circ} 39.69' N.$, Long. $82^{\circ} 33.99' W.$ were located by theodolite cuts by the Tampa Office. These piles, shown on Topo Sheet T-5841, are in existence. Eventually the piles will be used in the construction of a rear range for Cut "A" channel.

L. COMPARISON WITH PRIOR SURVEYS (Continued)

4. Extensive dredging for oyster shells was being done on the east and west sides of the main ship channel from Cut "D" northward during the survey. This dredging causes a continual change in the bottom configuration and accounts for the jagged bottom in this area.
5. The facilities around the old ferry docks at Piney Point, Lat. 27° 38.6' N., Long. 82° 33.6' W., are now in ruins. All old piles and channel entrance markers have been located and are plotted on the boat sheet.

See the Supplementary Descriptive Report H-8429 (SO-2358), attached, Section Z-2h for further information.

M. COMPARISON WITH CHART

This survey was compared with chart O&GS 1257 ⁵⁸⁶ corrected through 23 August 1958. The agreement was good. Specific comments are as follows:

1. The 29 foot sounding charted in Lat. 27° 47.28' N., Long. 82° 30.08' W. and the 22 foot sounding SSW 400 meters, from H-4563 appear to be in error. At the 29 foot sounding a depth of 33 feet was found. At the 22 foot sounding a depth of 29 feet was found.
2. The 14 foot shoal shown on the chart at Lat. 27° 45.4' N., Long. 82° 31.3' W. is in existence. With predicted tides the least sounding is now ~~10~~ ^{15'} feet. *15' is shallowest sdg. in area*
3. See the SUPPLEMENTARY DESCRIPTIVE REPORT H-8429 (SO-2358) attached to this report (Section Z-2h) for further information.

N. DANGERS AND SHOALS

See Addendum -
A sunken dredge at Lat. 27° 45.3' N., Long. 82° 31.2' W.

was reported to the Washington Office and has been charted.

See the SUPPLEMENTARY DESCRIPTIVE REPORT H-8429, (SO-2358), for further information on this subject.

O. COAST PILOT INFORMATION

A special report for this information will be submitted on an area basis.

P. AIDS TO NAVIGATION

All fixed aids to navigation are to be reported on form 567.

Floating aids to navigation within the limits of this sheet are listed as follows:

P. AIDS TO NAVIGATION (Continued)

SEE NPO LIST

NON-FLOATING AIDS SCALED FROM BOAT SHEET SO-2158:

<u>Tampa Bay</u>				Vol.	Page	Latitude	Longitude
	Buoy	3B- Blk, 2d.-cl.-can(s)	2	24	27°38.98'	82°36.80'	
Lighted,	Buoy	4B- Red	2	29	27°38.93'	82°36.72'	
"	"	5B- Blk.	2	25	27°39.88'	82°35.00'	
"	"	6B- Red, 2d.-cl nun(s)	2	30	27°39.85'	82°35.92'	
"	"	1C- Blk., 2d.-cl.-can(s)	2	26	27°40.82'	82°35.19'	
"	Bell	2C- Red	2	31	27°40.76'	82°35.11'	
"	Buoy	3C- Blk.	3	23	27°41.35'	82°34.30'	
"	"	4C- Red	2	43	27°41.19'	82°34.19'	
"	Bell	1D- Blk.	2	51	27°41.65'	82°33.54'	
"	Buoy	2D- Red, 2d.-cl.-nun(s)	3	20	27°41.59'	82°33.40'	
"	"	3D- Blk.	3	22	27°42.25'	82°33.03'	
"	Buoy	4D- Red, 2d.-cl.-nun(s)	3	19	27°42.20'	82°32.99'	
"	"	5D- Blk., 2d.-cl.-can(s)	3	22	27°42.86'	82°32.62'	
"	"	6D- Red	3	20	27°42.79'	82°32.54'	
"	"	1E- Blk.	3	21	27°43.48'	82°32.20'	
"	Buoy	2E- Red, 2d.-cl.-nun(s)	3	21	27°43.43'	82°32.10'	
"	"	3E- Blk.	4	14	27°44.06'	82°31.96'	
"	"	4E- Red, 2d.-cl.-nun(s)	5	70	27°44.05'	82°31.88'	
"	"	5E- Blk., 2d.-cl.-nun(s)	4	15	27°44.72'	82°31.71'	
"	"	6E- Red	5	70	27°44.73'	82°31.62'	
"	Bell	1F- Blk.	4	15	27°45.40'	82°31.51'	
"	"	2F- Red, 2d.-cl.-nun(s)	5	54	27°45.39'	82°31.39'	
"	Buoy	3F- Blk., 2d.-cl.-can(s)	4	16	27°46.04'	82°31.46'	
"	"	4F- Red	5	54	27°46.09'	82°31.39'	
"	"	5F- Blk.	5	15	27°46.81'	82°31.50'	
"	"	6F- Red	5	55	27°46.75'	82°31.38'	
Junction " Lighted - Blk. and Red							
Tampa Bay Cut F Horz'n. Bands				4	41	27°47.04'	82°31.41'

To Port Tampa

Lighted	Buoy	1G- Blk., 2d.-cl.-can(s)	6	15	27°47.15'	82°32.48'
	Bell-					
"	Buoy	2G- Red	5	56	27°47.19'	82°32.48'
"	"	3G- Blk.	6	16	27°47.25'	82°33.37'
"	"	4G- Red, 2d.-cl.-nun(s)	5	57	27°47.31'	82°33.38'
"	"	5G- Blk., 2d.-cl.-can(s)				
"	"	6G- Red				
"	"	1J- Blk.				
"	"	2J- Red				
"	Buoy	3J- Blk., 2d.-cl.-can(s)				
"	"	4J- Red				

Buoys 5G, 6G, 1J, 2J, 3J, and 4J were located by the East Coast Field Party and appear in SUPPLEMENTARY DESCRIPTIVE REPORT H-8429 (SO-2358) See attachment Z-2h of this report.

The aids to navigation within the limits of this survey do not differ in positions or characteristics from those on the charts or in the most recent edition of the Light List.

No reports were made to the Coast Guard relative to floating aids to navigation.

P. AIDS TO NAVIGATION (Continued)

There are no bridges, telephone or telegraph lines over waterways within the limits of this survey. There are no submarine cables within the limits of this survey. The old ferry routes within the limits of this survey has been disbanded because of the construction of the Sunshine Skyway Bridge.

Q. LANDMARKS FOR CHARTS

Data relative to landmarks for charts have been submitted on Form 567 by the Tampa District Office on an area basis.

R. GEOGRAPHIC NAMES

✓ JMB
In accordance with paragraph 39 of the instructions, investigation of geographic names was not conducted. No discrepancies with established names were noted during the course of the survey.

S. SILTED AREAS

No outstanding silted areas were discovered within the limits of the sheet.

T. BY PRODUCT INFORMATION

No Information.

U-Y. MISCELLANEOUS

See Section Z-2c of this report and the SUPPLEMENTARY DESCRIPTIVE REPORT H-8429 (SO-2358), attached, for information and abstracts relative to velocity corrections.

Z. TABULATION OF APPLICABLE DATA

1. Topographic Data - Submitted to the Norfolk Processing Office under separate cover.
2. Attachments:

- a. Statistics
- b. List of Signals
- c. ~~Tide~~ Note
- d. Settlement and Squat Tabulation
- e. Velocity dat - Bar Checks Abstract & Curves
- * f. U. S. Corps of Engineers Surveys (w/original only)
- g. Project CS-402 Sheet Index
- h. SUPPLEMENTARY DESCRIPTIVE REPORT H-8429 (SO-2358)

* *Sept 1957*
* * *55205-1956-57*
55206-1956-57
55207-1957
* *Prev. rec'd. and app'd to affected chts. Bp. 55205-07, 56352*
1-12-61 JMB

Z. TABULATION OF APPLICABLE DATA (Continued)

2. Attachments (Continued)

1. Approval Sheet.

Submitted,

Bobby S. Woodruff
Bobby S. Woodruff,
ENSIGN, C & G S

STATISTICS

Vol. No.	Day	Date	No. of Positions	Statute Miles Sdg.	Boat Used
1	(Blue) A	4/23/58	88	40.23	Ship SOSBEE
1	B	4/24/58	28	12.32	do J.B. Watkins
1 & 2	C	4/25/58	122	50.92	do C.O.P.
2	D	4/28/58	106	41.70	do
2 & 3	E	4/29/58	110	46.57	do
3	F	5/1/58	47	21.22	do
3 & 4	G	5/2/58	123	56.01	do
4	H	5/5/58	93	37.26	do
4	J	5/6/58	45	16.90	do
4 & 5	K	5/8/58	107	22.98	do
5	L	5/9/58	133	34.68	do
5 & 6	M	5/12/58	109	29.54	do
6	N	5/13/58	86	23.71	do
7	(Blue) a	8/20/58 ✓	90	19.87	Attached to Sosbee - JB Watkins - C.O.P. Skiff 735
7	b	8/21/58	60	11.35	do
7	c	8/22/58	45	5.09	do
8	d	8/25/58	96	15.40	do
8	e	8/26/58	60	10.80	do
8 & 9	f	9/12/58 ✓	180	38.75	do
10	(Purple) a	✓ 4/28/58	30	8.39	East Coast Field Party - R.C. Darling - C.O.P. Launch CS-183
10	b	4/29/58	72	18.74	do
10	c	4/30/58	69	17.77	do
10	d	5/1/58	41	10.69	do
10 & 11	e	5/2/58	117	30.36	do
11	f	5/5/58	134	37.49	do
11	g	5/6/58	25	6.44	do
12	h	5/8/58	97	25.40	do
12	J	5/12/58	27	7.70	do
12	k	5/14/58	90	24.49	do
12 & 13	l	5/15/58	113	29.90	do
13	m	5/16/58	85	21.96	do
13	n	5/20/58	126	33.24	do
13	p	5/21/58	22	6.67	do
14	q	5/23/58	128	4.67	do
14	r	✓ 5/26/58	114	31.28	do
Totals			3017	850.49	

SQUARE NAUTICAL MILES OF HYDROGRAPHY = 69.0

Note:

Except for the Skiff 735 work (Blue, lower case day letters), which developed the inshore shallow area in the vicinity of Coakroach Bay, this work was accomplished 4/23 to 5/26/58

H-8429 (80-2358)

Name	Source	Remarks
ABE	△	△ TAMPA BAY CUT "D" CHAN. R.F.LT., 1957
AOE	*	
BRIC	△	△ ST.PETERSBURG, FLA. POWER CO. RED BRICK STACK, 1934
BURG	△	△ ST.PETERSBURG, FLA. FIRST METH. CHURCH CORILLON TOWER, 1931
CAB	△	△ TAMPA BAY CUT "B" CHAN. R.F.LT., 1957
CAM	*	
DILL	△	△ MACDILL FIELD CHECKERED WATER TANK, 1946
DOG	△	△ TAMPA BAY CUT "D" CHAN. R.R.LT., 1957
DOM	*	△ DOME (LDMK)
EAR	△	△ TAMPA BAY MULLET KEY CHANN. R.R.LT., 1957
EGO	△	△ TAMPA BAY CUT "B" CHANN. R.R.LT., 1957
ELF	*	
EMO	*	
EVA	*	
GEM	△	△ FUTURE R.R.LT. CHANN. CUT "A" TAMPA BAY
GULF	△	△ PORT TAMPA GULF REFINING CO. SILVER WATER TANK, 1934
JAP	△	△ TAMPA BAY CUT "C" CHANN. R.F.LT., 1957
LOG	△	△ FUTURE F.R.LT. CHANN. CUT "A", TAMPA BAY
MAN	△	△ TAMPA BAY CUT "C" CHANN. R.R.LT., 1957
MAID	△	△ SHORAN STATION (T-H-11-1956) Lat. 27°49'20.819" Long. 82°35'39.329"
NORT	△	△ NORTH RADIO TOWER (WSUN)
OIL	△	△ TAMPA BAY CUT "E" CHANNEL R.F.LT., 1957
PINE	△	△ SHORAN STATION (PINELLAS 2, No. 2) Lat. 27°42'15.030"; Long. 82°38'31.814".
PIN	△	△ ST.PETERSBURG HARBOR PT. PINELLAS CHAN.LT.No.1
RAD	△	△ RADIO MAST (STEE) (WTSP), 1957
RAN	*	
REAR	△	△ TAMPA BAY CUT "K" CHANNEL R.R.LT.
RIP	△	△ TAMPA BAY CUT "E" CHANNEL R.R.LT., 1957
ROL	*	Control Tower (Ld.Mk.)
RONT	△	△ TAMPA BAY CUT "K" CHANNEL R.F.Lt., 1957
RANG	△	△ TAMPA BAY CUT "F" CHANNEL R.R.LT., 1957
SHEL	△	△ PORT TAMPA SHELL OIL CO. CONE STACK, 1934
SNEL	△	△ TAMPA BAY CUT "G" CHANNEL R.R.LT., 1957
SPIT	△	△ MACDILL AFB HOSPITAL WATER TANK, 1958
	△	△ " " " " stock, 1946

H-8429 (80-2358)

Name	Source	Remarks
TACK	△	△ FLORIDA POWER CO. STACK, 1957, H T 303
TOWE	△	△ MACDILL FIELD CONTROL TOWER
VINO	△	△ VINOY PARK HOTEL CUPULO (VINOY, 1926)
WED	*	
ZOO	△	△ ST.PETERSBURG HARBOR, POINT PINELLAS CHANNEL LIGHT NO. 4

(* Topo - Photo location.).
(△ Triangulation Station).

TIDE NOTE

H-8429

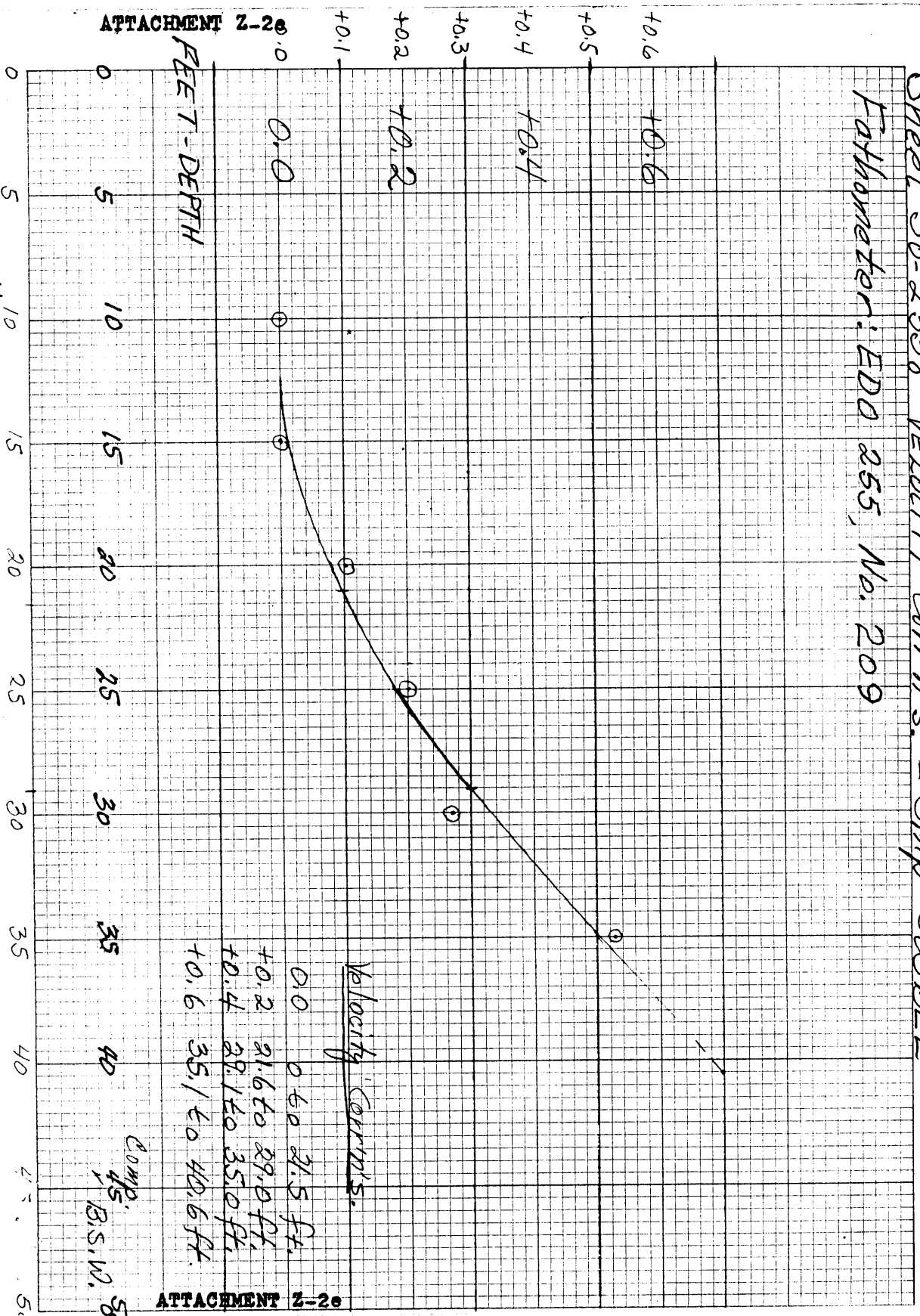
(80-2358)

Soundings were reduced to MLW on the portable ✓
automatic tide gage at Pinellas Point, St. Petersburg,
Florida., Latitude $27^{\circ} 40.23'$ North, Longitude $82^{\circ} 33.4'$
West. ₄₂ _{38.4}

Mean low water corresponded to a reading of 1.5
feet on the staff.

No time or range factor was applied.

Sheet 50-2358 Velocity Cor'n's. - Ship SCSBEE
 Fathometer: EDO 255, No. 209



Velocity Cor'n's.
 0.0 0.60 21.5 ft.
 +0.2 21.6 to 29.0 ft.
 +0.4 29.1 to 35.0 ft.
 +0.6 35.1 to 40.6 ft.

Comp. 45
 1 B.S.W.

ATTACHMENT 2-2e

ATTACHMENT 2-2e

ABSTRACT OF BAR CHECKS

SKIFF CS-735 - SHEET 2358

808J

NO. 140-SP

Depths in feet		4	5	6	8	10	12	15	20	Init.	Fath.	Vol.	Page
Dates	Day				Correction in feet								
8/21/58	b		0.0	+0.2	0.0					0.6	140SP	7	45
8/22/58	c		0.0	0.0	0.0					0.6	140SP	7	60
9/12/58	f			0.0	0.0	0.0	0.0			0.6	140SP	8	48
Sum			0.0	+0.2	0.0	0.0	0.0			0.6	140SP		
Mean			0.0	0.0	0.0	0.0	0.0			0.6	140SP		

ABSTRACT OF BAR CHECKS
Ship BOSBEE, Sheet 80-2358

Edo 255, No. 209

Depth Date & Day	10	15	20	25	30	35	40	45	50	Initial Set	Vol. & Page	Remarks
4/23 A	0.0 +0.2	0.0 +0.2	0.0 +0.4	0.0 +0.4	0.0 +0.4	0.0 +0.6				4.0 3.0	1	32
4/24 B												
4/25 C	0.0	0.0	0.0	0.0	0.0	+0.2				4.0	1	52
4/28 D												
4/29 E	0.0	0.0	+0.2	+0.2	+0.4	+0.8				4.0	2	72
5/1 F	0.0	0.0	0.0	+0.2	+0.4	+1.0				4.0	3	43
5/2 G												
5/5 H	0.0	0.0	0.0	+0.2	+0.2	+0.4				4.0	4	41
5/6 J												
5/8 K												
5/9 L	0.0	0.0	0.0	+0.2	+0.4	+0.2				4.0	5	44
5/12 M	0.0	0.0	+0.2							4.0	5	60
5/13 N	0.0	0.0	+0.2							4.0	6	38
Mean	0.0	0.0	+0.1	+0.2	+0.4	+0.6						

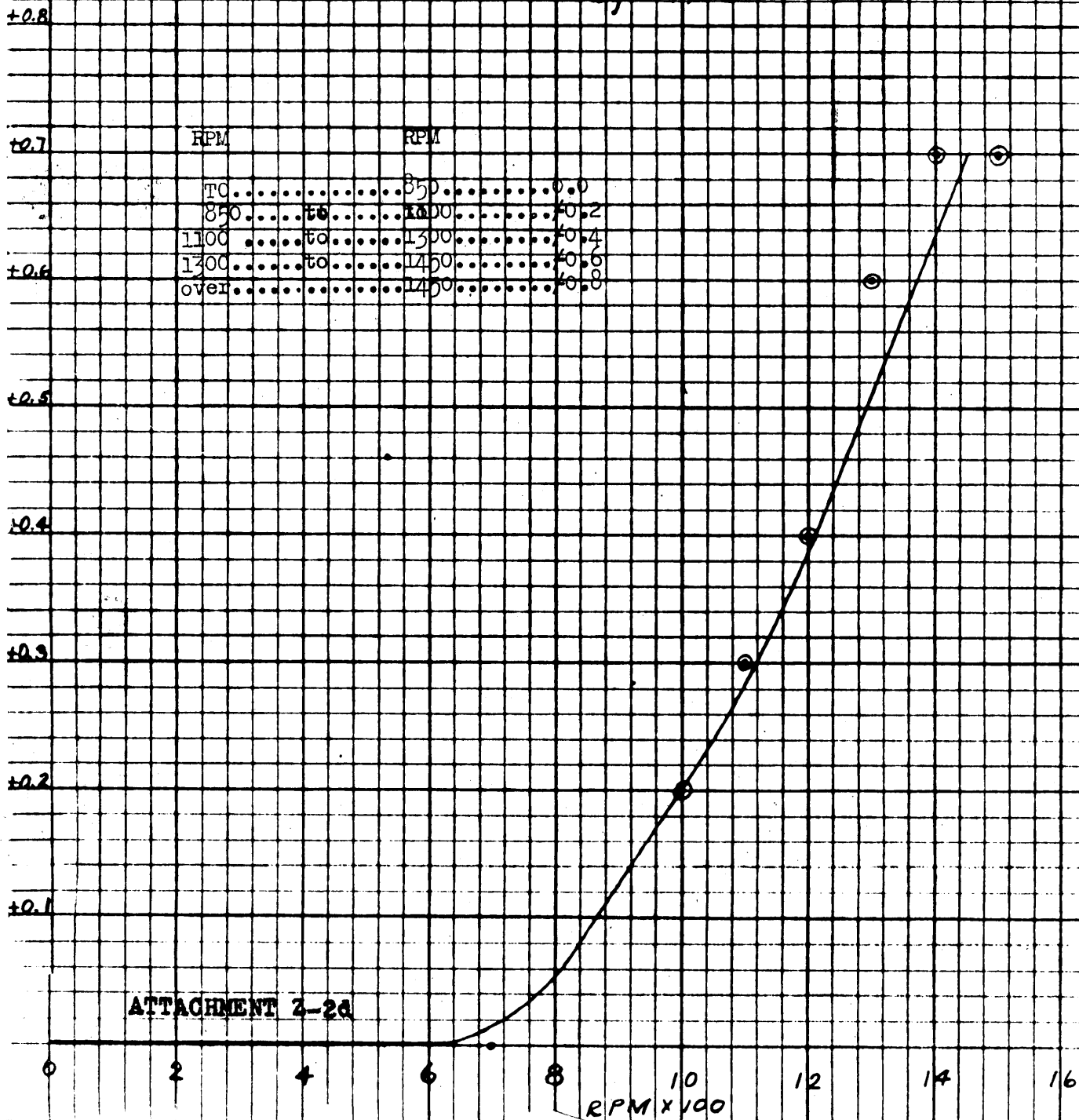
0.00 0.00 +0.10 +0.20 +0.27 +0.83

Comp. J.B.W. - mjt

Settlement & Squat

Ship SOSBEE

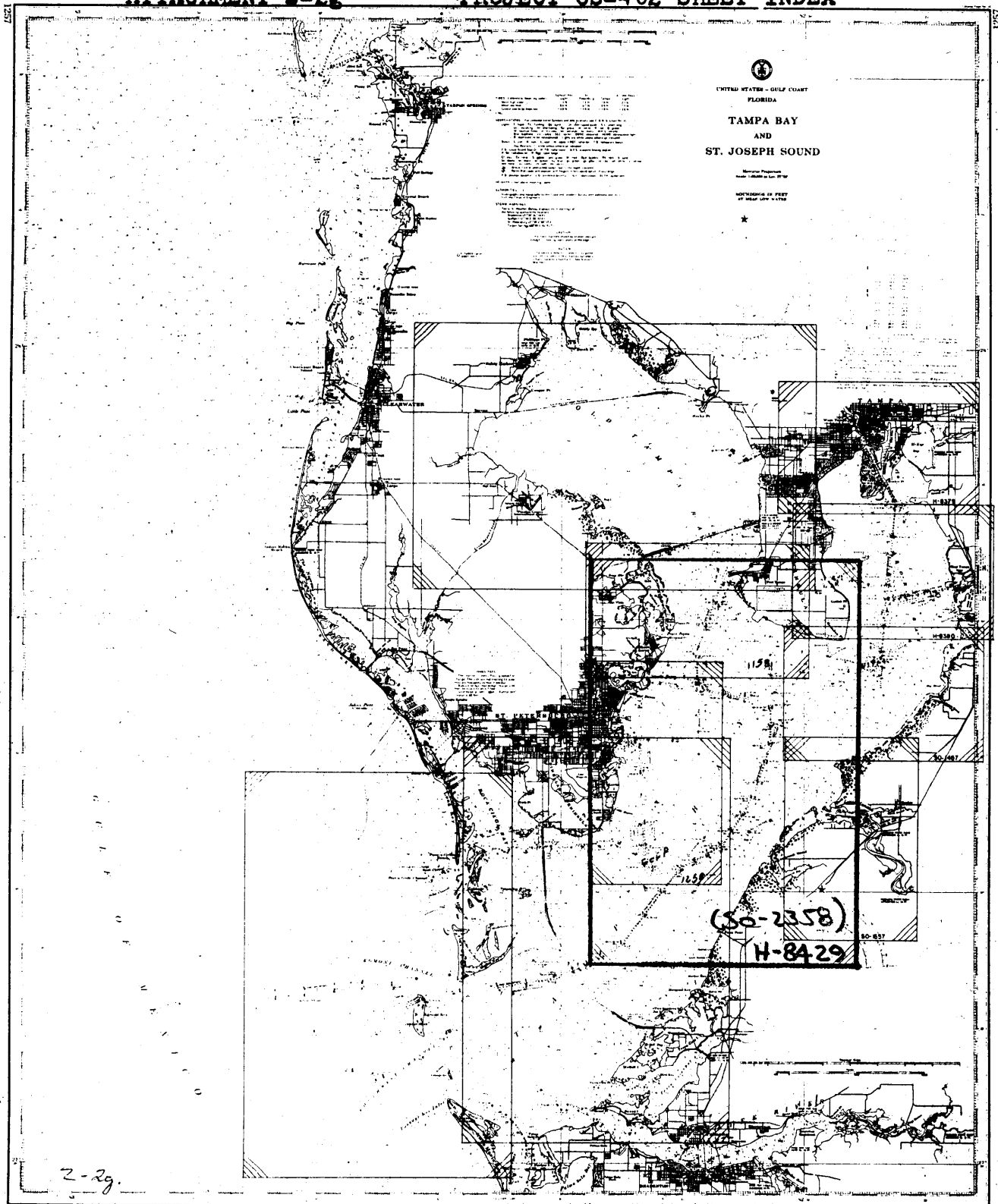
May 1958



U. S. CORPS OF ENGINEERS SURVEYS

Four after-dredging surveys, Cut "B" Channel,
Cut "C" Channel, Cut "D" Channel, Cut "E" Channel,
Cut "F" Channel, Cut "G" Channel, and part of Cut
"J" Channel applicable to this survey are enclosed
herewith (File Number 45-25,052-2; 45-24,499-6;
45-24,499-5; and 45-24,499-4).
55206 (1956-57) Portion of C, D & E
55207 (1956-57) Portion of C & B
55208 (1956-57) Portion of Cut E, F & J

See Section Z of Descriptive Report for Sheet
H-8428 (SO-2258) for further information on U. S.
Engineer Surveys in this area.



Z-2g.

SUPPLEMENTARY DESCRIPTIVE REPORT H-8429 (SO-2358)

A supplementary descriptive report compiled by the East Coast Field Party is attached in this section. The report contains the shoran controlled hydrography sub-report and the visual hydrography sub-report of the East Coast Field Party. Volumes 10 thru 14 of the sounding records are applicable to this supplementary report.

SHORAN REPORT

EAST COAST FIELD PARTY

PROJECT 14020

A. PROJECT

The authority for this survey is contained in Instructions dated 13 February 1957 for Project CS-402.

B. LIMITS AND DATES

Same as SOSBEE.

Field work was begun on 25 April and ended on 26 June 1958.

C. VESSELS AND EQUIPMENT

The Shoran equipment was installed and operated in Launch CS-183. The transmitter, No. 417 was mounted below the plotting table and the Receiver, No. 1213, was placed just aft of the plotting table. The ONAN portable generator was mounted on the stern under an insulated box with the side facing aft, left open for ventilation. The Antenna was mounted on top of the cabin with guy wires for support.

Shoran Stations - Same as SOSBEE.

D. DIFFICULTIES EXPERIENCED WITH EQUIPMENT

Many difficulties were experienced with the Shoran Stations. Radio contact was maintained between Launch CS-183, Ship SOSBEE, and a truck equipped with a radio Transmitter and Receiver. This eliminated unnecessary delay due to Shoran difficulties.

Station PINE and MAID were receiving current from the end of an extension line. This caused both stations to have a fluctuating voltage input. Also, two units were operating simultaneously ranging from 1.0 to 15.0 miles in distance from the stations. It was therefore difficult to keep the gain adjusted and the transmitter kicked out on occasions. Other difficulties experienced with the shoran sets were part replacements and minor repairs due to old and worn equipment.

The ONAN portable generators used were old and worn. Much time was loss due to lack of compression in the generator motors and short circuits in the generators. On occasions the motor output was not sufficient to operate the Launch Shoran set.

ATTACHMENT Z-2h (2)

E. OFFICE DETERMINATION OF CORRECTIONS

Calibration same as SOSBEE except that in addition calibrations were made at Lighted Beacon No. 1. The only rejections were those that were felt to be unreliable.

A shoran correction curve was drawn from mean values of the Abstract of Shoran Calibrations. Break points on the curve were picked 0.005 mile intervals and tabulated. These corrections were then entered and checked in the sounding record volumes.

F. RESULTS

Shoran Calibration Corrections obtained from the calibrations were applied to the positions plotted on the boat sheet as the field work progressed. Upon completion of the sheet a smooth curve was drawn. The difference in the corrections obtained were close enough to the corrections applied in plotting that no replotting was necessary.

Attachments:

Abstract of Shoran Calibrations
Shoran Calibration Curves
Shoran Correction Abstract

A comparison of final positions (after Shoran Corrector Application) for several Shoran location of fixed aids indicated some inaccuracy of the correctors used. No revisions were made to the smooth plot because of the scale of the survey. EET.

BAR CHECKS CURVE NO. 2

29 April to 26 May 1958

SHEET SO-2358 LAUNCH CS-183

Date	6'	12'	18'	24'	30'	36'	Fathometer Used
	Corrections						
4/29	+0.2	+0.2	+0.6				202
4/30	0.0	+0.4					do
5/1	+0.1	+0.3	0.0				do
5/5	+0.3	+0.5	+1.0				do
5/8	+0.2	+0.4	+0.4				do
5/9	0.0	+0.2	+0.4	+0.8			do
5/13	+0.2	+0.3	+0.5	+0.7			do
5/15	+0.2	+0.6	+0.5	+0.7			do
5/16	+0.2	+0.5	+0.4	+0.8			do
5/21	+0.2	+0.5	+0.5	+0.6	+0.9		do
5/26	+0.1	+0.4	+0.5	+0.8	+1.0		do
Mean	+0.2	+0.4	+0.5	+0.7	+1.0		
Less L.L. Correction-0.2		-0.1	-0.0	-0.1	-0.1		
MEAN VALUES	+0.0	+0.3	+0.5	+0.6	+0.9	(Curve No. 2)	

Note: Velocity Corrections were not applied to soundings on Boat Sheet.

CURVE No. 1

SHEET SO-2358 LAUNCH CS-183

Initial on 4/28 set on 1.0 ft. instead of 2.0 ft., therefore 1.0 ft. added to Curve No. 2 for Curve No. 1.

	6'	12'	18'	24'	30'	36'
MEAN VALUES (CURVE No. 1)	+1.0	+1.3	+1.5	+1.6	+1.9	

SHEET SO-2358 FATHOMETER REPORT:

A Kato Converter was used with the EDO 202 Fathometer on this sheet. The corrections determined by daily bar checks were averaged and corrected for L.L. discrepancies. The bar checks were uniform with the exception of two which were rejected because they were felt to be unreliable.

ABSTRACT OF SHORAN CALIBRATIONS

EAST COAST FIELD PARTY

PROJECT CS-14020

LAUNCH CS-183

Date	Cal.Pt."A"		Cal.Pt."B"		Cal.Pt."ZETA"		Lighted Beacon No. 1	
	PINE	MAID	PINE	MAID	PINE	MAID	PINE	MAID
	4.828	6.108	8.574	2.841	1.930	9.669	2.490	9.667
4/25	+0.106	+0.083	+0.092	+0.080	+0.122	+0.084		
4/28					+0.125	+0.060		
4/30							+0.065	+0.000
5/2	+0.059	+0.016					+0.054	+0.016
5/8	+0.067R	+0.010						
5/14	+0.051	+0.028						
5/16			+0.030	+0.028				
5/20	+0.039	+0.024			-0.055 R	+0.007 R	+0.047	-0.005

Note: Zero Check Changed 4/30 to Read PINE MAID
99.815 99.815

The following Calibrations were rejected because they were felt to be unreliable.

1. 5/8 - Pt. "A" PINE.
2. 5/20- Pt. "ZETA"
PINE & MAID.

SHORAN CORRECTION ABSTRACT

EAST COAST FIELD PARTY

LAUNCH CS-183

4/25 to 4/28/58		4/30 to 5/26/58	
PINE	MAID	PINE	MAID
0.2 - 0.5=+0.140	0.6 - 1.0=+0.100	0.2 - 0.5=+0.080	0.2 - 0.4=+0.055
0.5 - 0.9=+0.135	1.0 - 1.5=+0.095	0.5 - 0.8=+0.075	0.4 - 0.7=+0.050
0.9 - 1.4=+0.130	1.5 - 2.1=+0.090	0.8 - 1.3=+0.070	0.7 - 1.1=+0.045
1.4 - 2.0=+0.125	2.1 - 2.8=+0.085	1.3 - 1.9=+0.065	1.1 - 1.6=+0.040
2.0 - 2.8=+0.120	2.8 - 4.0=+0.080	1.9 - 2.5=+0.060	1.6 - 2.3=+0.035
2.8 - 3.8=+0.115	4.0 - 8.3=+0.075	2.5 - 3.4=+0.055	2.3 - 3.1=+0.030
3.8 - 4.9=+0.110	8.3 - 12.0=+0.070	3.4 - 3.5=+0.050	3.1 - 4.6=+0.025
4.9 - 6.1=+0.105		4.5 - 5.7=+0.045	4.6 - 6.3=+0.020
6.1 - 7.3=+0.100		5.7 - 6.9=+0.040	6.3 - 7.9=+0.015
7.3 - 8.5=+0.095		6.9 - 8.1=+0.035	7.9 - 9.6=+0.010
8.5 - 9.6=+0.085		8.1 - 9.2=+0.030	9.6 - 11.3=+0.005
9.6 - 10.8=+0.080		9.2 - 10.4=+0.025	11.3 - 12.0=+0.000
		10.4 - 11.7=+0.020	

DESCRIPTIVE REPORT

HYDROGRAPHIC SHEET (SO-2358)

PROJECT CS-14020

EAST COAST FIELD PARTY

Robert C. Darling, In Charge

LAUNCH CS-183

SCALE 1:20,000

A. PROJECT

Same as SOSBEE.

B. SURVEY LIMITS AND DATES

Same as SOSBEE.

C. VESSELS AND EQUIPMENT

Launch CS-183 was operated from the Central Yacht Basin, St. Petersburg, Florida for the sheet. Hydrography was run at a standard sounding speed of 8 knots. The Launch has a turning radius of 50 meters at half rudder and 8 knots. Echo soundings were obtained with an EDO Model 255 Fathometer No. 202. The transducer unit was mounted in the hull on either side of the keel just aft of amidship.

D. TIDES AND CURRENT STATIONS

Same as SOSBEE. Pinellas Point used 28 April 1958 to 21 May 1958 and Shell Point used 21 May 1958 to 26 May 1958.

MLW for Shell Point Tide Staff was 2.6 feet.

E. SMOOTH SHEET

Same as SOSBEE.

F. CONTROL STATIONS

Control consist of ¹⁰~~9~~ triangulation stations, no topographic stations and 2 photo-topo signals.

List of Triangulation Stations used as signals are as follows:

Signal Name	Triangulation Name
BRIC	- St. Petersburg Florida Power Company, Red Stack, 1934
DILL	- MacDill Field, checkered water tank, 1946
REAR	- Tampa Bay Cut K Channel Range Rear Lt.
FRONT	- Tampa Bay Cut M Channel Range Front Lt., 1957
SNEL	- Tampa Bay Cut G Channel Range Rear Lt.
SPIT	- MacDill AFB Hospital, water tank, 1955
TACK	- Florida Power Company Stack, 1957
TAMP	- Port Tampa Black W. T., 1945
VINO	- Vinoy Park Hotel Cupulo (Vinoy, 1926)
	- MacDill AFB Hospital, Stack, 1946

F. CONTROL STATIONS (Continued)

List of Photo-hydro Stations used as signals are as follows:

RAD - Radio Mast (WTSP)
WED - E. Gable Elevator

G. SHORELINE AND TOPOGRAPHY

SAME.

H. SOUNDINGS

Soundings were obtained with an EDO type recorder, hand lead, and sounding pole. Bottom samples were obtained with an armed with soap hand lead.

I. CONTROL OF HYDROGRAPHY

Hydrography was controlled by Shoran fixes except for the last 2 days, May 23 and May 26, 1958.

See Shoran Report.

U. ADEQUACY OF SURVEY

The area which this Survey covers is complete and adequate to supersede prior surveys for charting except for one charted Shoal as reported in N. DANGERS AND SHOALS.

K. CROSSLINES

Same.

L. COMPARISON WITH PRIOR CHARTS

Comparisons were made with charts 586 and 587. Discrepancies are as reported under DANGERS AND SHOALS.

M. COMPARISON WITH PRIOR SURVEYS

Same.

N. DANGERS AND SHOALS

The new shoals developed are as follows:

Lat. 27°47.65' N., Long. 82°35.20' W., Shoal, Least Depth 9 ft. NOT CHARTED, Old Depth. Pos. 99r (pur)

Lat. 27°47.52' N., Long. 82°33.08' W., Pinnacle, " " 31m (pur) 16 X 15 ft. NOT CHARTED.

Lat. 27°47.52' N., Long. 82°32.92' W., Pinnacle, " " 30m (pur) 18 17 ft. NOT CHARTED.

ATTACHMENT Z-2h (7)

N. DANGERS AND SHOALS (Continued)

At the time of hydrography, it was believed that the 15 ft. shoal reported at Lat. 27° 47.52' N., Long. 82° 33.08' W. was the 18 ft. shoal charted at Lat. 27° 47.60' N., Long. 82° 33.50' W., therefore no development was made on charted shoal. It is recommended the charted shoal be retained and the new shoal charted also. *The 18' noted above falls within spoil area and the soundings has been dropped from charting.*

The following shoal areas are charted as spoil areas:

* Lat. 27° 40.80' N., Long. 82° 36.30' W. 11' least Depth
 Lat. 27° 42.30' N., Long. 82° 36.30' W. 10' " "
 Lat. 27° 41.70' N., Long. 82° 37.00' W. 10' " "
 * ~~Lat. 27° 40.80' N., Long. 82° 36.30' W.~~

It is recommended these areas remain charted as spoil areas.
Dumping Areas, Spoil Areas are designated by C&E.

O. COAST PILOT INFORMATION

Special Coast Pilot Report will be submitted on an area basis.

P. AIDS TO NAVIGATION

233/54
 399/58
 * CL 400/58
 402/58

All fixed aids to Navigation will be reported on form*567.

Those checked by D. P.'s are listed below. *(Shoran locations)*

Fixed
~~Floating~~ Aids to Navigation within limits of this sheet are as follows:

Those checked by D.P.'s are listed below:-

Name	Description	Depth	Vol.	Page	Pos.	Lat.	Long.
Lt. Beacon No.1	Pt.Pinellas						
	Channel	13	7	12	1b	27°40.95'	82°36.58'
Lt. Bn. No. 2	Boca Ciega	tides					
	Bay	7.0	71	32	1c	27°41.76'	82°36.55'
Lt. No. 4	Pt. Pinellas	12.5	7	64	21e	27°41.72'	82°36.52'
Cut B Range	Front Lt.	14.8	8	9	78e	27°42.78'	82°33.41'
Cut J Range	Rear Lt.	11.4	9	39	9k	27°45.04'	82°34.36'
Cut J Range	Front Lt.	13.4	9	39	81	27°45.90'	82°34.38'
Cut G Range	Rear Lt.	6.6	11	5	2q	27°47.60'	82°35.96'
Cut G Range	Front Lt.	21.8	11	37	6r	27°47.53'	82°35.28'
Cut K Range	Rear Lt.	16.0	11	58	105r	27°47.94'	82°34.94'

Floating Aids within the limits of this sheet are as follows:-

Buoy No. 2	Red, 2d. ol. nun(s)						
	Pt. Pinellas Chan.	16.0	7	12	2b	27°40.95'	82°36.52'
Lt. Buoy No. 6	" " Chan.	20.0	7	55	35d	27°42.53'	82°36.55'
" " 5	Same. Blk., can(s)	23.0	7	55	36d	27°42.56'	82°36.67'
Buoy No. 3	do., Blk., can(s)	12.8	7	65	22e	27°41.78'	82°36.62'
Buoy No. 3 J	Blk., can(s)	23.4	11	27	110q	27°48.60'	82°34.50'

ATTACHMENT Z-2h (8)

P. AIDS TO NAVIGATION (Continued)

Floating Aids within the limits of this sheet are as follows: (Continued)

Lt. Bell Buoy	4 J	25.7	11	27	111q	27°48.60'	82°34.37'
" Buoy	5 G	17.2	11	40	26r	27°47.44'	82°34.20'
" "	6 G	28.0	11	41	27r	27°47.36'	82°34.14'
" "	2 J	27.8	11	60	118r	27°47.60'	82°34.38'
" "	1 J	23.6	11	60	119r	27°47.61'	82°37.45'

Note: (1 Buoy Lat. 27° 45.5' N., Long. 82° 35.4' N., not ✓
(Buoy YB) located).

Q. LANDMARKS FOR CHARTS

See SOSBEE's.

R. GEOGRAPHIC NAMES

See SOSBEE's.

S. SILTED AREAS

There are no silted areas to report (See SOSBEE's).

T. BY PRODUCT INFORMATION

There is no By-Product Information to report.

U.- Y. MISCELLANEOUS

See Report of SOSBEE's.

Field Procedures that deviate from standard Practice:- ✓

It will be noted throughout the record volumes that when a line ends or begins a Latitude or Longitude are given. However, if the description is L. Breaks and the distance is less than 1000 meters to where the L. Resumes, the distance and direction are given from where the line breaks to where it resumes.

Z. TABULATION OF APPLICABLE DATA

1. E.C.F.P. Velocity Correction Curves, No. 1 of 2.
2. E.C.F.P. Velocity Correction Curves, No. 2 of 2.

This SUPPLEMENTARY DESCRIPTIVE REPORT Submitted to the Ship SOSBEE by CDR Robert C. Darling, Officer In Charge of the EAST COAST FIELD PARTY.

2
4
6
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36

Depth in Feet

VELOCITY CORRECTIONS
U.S. Coast and Geodetic Survey
Ship. ECFP.....Launch CS-183
LCDR Robert C. Darling Comdg.
These corrections are to be used
between 4/28, 1958 and.....19
in the locality OLD TAMPA BAY
St. Petersburg, Florida
for hydrographic surveys Nos.
90-2358

Velocity curve No. 1 of 2
4/28/58
a- day

Depth	Corr.
0.0-9.0.....	+1.0
9.0-14.0.....	+1.2
14.0-19.0.....	+1.4
19.0-24.5.....	+1.6
24.5-30.0.....	+1.8
30.0-deeper.....	+2.0

+1.0

+1.4

+1.8

+2.2

Corr in Feet

VELOCITY CORRECTIONS

U.S. Coast and Geodetic Survey
Ship ECFP.....Launch CS-183

LCDR Robert C. Darling Comdg.

These corrections are to be used
between 4/29, 1958 and 5/26, 1958
in the locality OLD TAMPA BAYSt. Petersburg, Florida
for hydrographic surveys Nos.

(80-2358)

Velocity Curve No. 2 of 2

4/29-5/26

b-r days

4

6

8

12

16

20

24

28

Depth	Corr.
0.0-9.0.....	0.0
9.0-14.0.....	+0.2
14.0-19.0.....	+0.4
19.0-24.0.....	+0.6
24.0-30.0.....	+0.8
30.0-deeper.....	+1.0

36

+0.2

+0.4

+0.6

+0.8

+1.0

+1.2

APPROVAL SHEET

H-8429

(SO-2358)

The area covered by this survey is adequate for charting. Records and reports are complete and comprehensive. The boat sheet was inspected daily by the Chief of Party. There are no apparent holidays in the area covered by the sheet.

All records and reports have been submitted to the Norfolk District Office for smooth plotting.

Reference should be made to latest U. S. Corps of Engineers Surveys of Tampa Bay Cut "B", "C", "D", "E", "F", "G", and "J" Channels. Improvement of these channels was being carried out during the course of this survey, and several changes will undoubtedly be found.

As noted in this report the rear range of Cut "E" was mis-plotted and a small portion of hydrography controlled by this signal, will change in the smooth plot.

To expedite the work, an overlay was made of the boat sheet so that two hydro parties could work at the same time. In transferring the overlay soundings to the boat sheet it was found that the overlay had distorted. Accurate transfer was almost impossible. It is recommended that in the future, a separate boat sheet be prepared, particularly when an extensive area of hydrography is divided in this manner.

For LT. John B. Watkins, Jr.

Bobby S. Woodruff
Bobby S. Woodruff,
ENSIGN, USC&GS

Submitted,

Miller J. Tonkel
Miller J. Tonkel,
LCDR., C & G S
Cdg. Ship SOSBEE

NORFOLK PROCESSING OFFICE
LIST OF SIGNALS
H-8429

TRIANGULATION STATIONS

✓ABE TAMPA BAY, CUT D CHAN RANGE, FRONT LT., 1957
✓BRIC ST. PETERSBURG, FLA. POWER CORP., RED BRICK STACK, 1934
✓CAB TAMPA BAY, CUT B CHAN. RANGE, FRONT LT., 1957
✓DILL MACDILL FIELD CHECKERED WATER TANK, 1946
✓DOG TAMPA BAY, CUT D CHAN RANGE, REAR LT., 1957
✓EAR TAMPA BAY, MULLET KEY CHAN. RANGE, REAR LT., 1957
✓EGO TAMPA BAY, CUT B CHAN. RANGE, REAR LT., 1957
✓JAP TAMPA BAY, CUT C CHAN. RANGE, FRONT LT., 1957
✓MAN TAMPA BAY, CUT C CHAN. RANGE, REAR LT., 1957
✓OIL TAMPA BAY, CUT E CHAN. RANGE, FRONT LT., 1957
✓RANG TAMPA BAY, CUT F CHAN. RANGE, REAR LT., 1957
✓REAR TAMPA BAY, CUT K CHAN. RANGE, REAR LT., 1957
✓RIP TAMPA BAY, CUT E CHAN. RANGE, REAR LT., 1957
✓RONT TAMPA BAY, CUT K CHAN. RANGE, FRONT LT., 1957
✓SNEL TAMPA BAY, CUT G CHAN. RANGE, REAR LT., 1957
✓SPIT MACDILL FIELD, AFB HOSPITAL TANK, 1955-59
✓TACK WEEDON I., FLA. POWER CO., WHITE CONCR. STACK, 1957
✓TAMP PT. TAMPA, BLACK WATER TANK, 1945
✓VINO ST. PETERSBURG, VINOY PARK HOTEL, CUPOLA, 1934
MAID MAID, 1958
PINE PINE, 1958
MACDILL AFB HOSPITAL STACK, 1946

TOPOGRAPHIC STATIONS

<u>T-10555</u>	<u>T-10565</u>	<u>TAMPA OFFICE LETTER-24 OCT. 1960</u>
Wed	Elf Ran	Nort Pin Rad Zoo

PHOTO-GRAMMETRIC FEATURES

T-10565

Gem

FROM BOAT SHEET

Log

NORFOLK PROCESSING OFFICE
FLOATING AIDS TO NAVIGATION

H-8429

<u>BUOY</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>DEPTH</u>	<u>POS. NO.</u>	<u>DATE</u>
<u>TAMPA BAY CUT B CHAN.</u>					<u>1958</u>
Buoy 3B	27-39.01✓	82-36.72✓	39✓	7D✓	Apr. 28
Lt'd. Buoy 4B	38.95✓	36.66✓	38✓	19D✓	"
Lt'd. Buoy 5B	39.89✓	35.94✓	37✓	9D✓	Apr. 28
Buoy 6B	39.87✓	35.88✓	36✓	22D✓	"
<u>TAMPA BAY CUT C CHAN.</u>					
Buoy 1C	40.76✓	35.18✓	36✓	105E✓	Apr. 29
Lt'd. Bell Buoy 2C	40.65✓	35.17✓	37✓	84E✓	"
Lt'd. Buoy 3C	41.25✓	34.25✓	39✓	103E✓	"
Lt'd. Buoy 4C	41.19✓	34.22✓	37✓	65D✓	Apr. 28
<u>TAMPA BAY CUT D CHAN.</u>					
Lt'd. Bell Buoy 1D	41.65✓	33.50✓	39✓	101E✓	Apr. 29
Buoy 2D	41.61✓	33.38✓	30✓	88E✓	"
Lt'd. Buoy 3D	42.27✓	33.01✓	38✓	99E✓	"
Buoy 4D	42.20✓	32.96✓	38✓	90E✓	"
Buoy 5D	42.88✓	32.58✓	25✓	97E✓	"
Lt'd. Buoy 6D	42.79✓	32.52✓	29✓	92E✓	"
<u>TAMPA BAY CUT E CHAN.</u>					
Lt'd. Bell Buoy 1E	43.49✓	32.27✓	40✓	20F✓	May 1
Buoy 2E	43.495✓	32.16✓	35✓	53M✓	May 12
Lt'd. Buoy 3E	44.07✓	31.95✓	26✓	117G✓	May 2
Buoy 4E	44.05✓	31.85✓	36✓	51M✓	May 12
Buoy 5E	44.72✓	31.68✓	36✓	119G✓	May 2
Lt'd. Buoy 6E	44.74✓	31.58✓	30✓	48M✓	May 12
<u>TAMPA BAY CUT F CHAN.</u>					
Lt'd. Bell Buoy 1F	45.41✓	31.47✓	29✓	121G✓	May 2
Buoy 2F	45.39✓	31.38✓	37✓	121L✓	May 9
Buoy 3F	46.07✓	31.43✓	19✓	123G✓	May 2
Lt'd. Buoy 4F	46.07✓	31.33✓	36✓	123L✓	May 9
Lt'd. Bell Buoy 4F	46.82✓	31.46✓	36✓	71K✓	May 8
Lt'd. Buoy 6F	46.77✓	31.34✓	36✓	125L✓	May 9
<u>TAMPA BAY CUT G CHAN.</u>					
Buoy 1G	47.11✓	32.49✓	29✓	104M✓	May 12
Lt'd. Bell Buoy 2G	47.22✓	32.47✓	31✓	129L✓	May 9
Lt'd. Buoy 3G	47.25✓	33.35✓	27✓	107M✓	May 12
Buoy 4G	47.33✓	33.34✓	26✓	131L✓	May 9
Buoy 5G	47.38✓	34.17✓	27✓	26r✓	May 26
Lt'd. Buoy 6G	47.45✓	34.20✓	31✓	27r✓	"

continued

<u>BUOY</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>DEPTH</u>	<u>POS. NO.</u>	<u>DATE</u>
<u>TAMPA BAY CUT J CHAN.</u>					<u>1958</u>
Lt'd. Buoy 1J	27-47.61✓	82-34.45✓	23✓	119r✓	May 26
Lt'd. Buoy 2J	47.60✓	34.32✓	27✓	118r✓	"
Buoy 3J	48.62✓	34.48✓	25✓	110q✓	May 23
Lt'd. Bell Buoy 4J	48.62✓	34.37✓	24✓	111q✓	"
<u>TAMPA BAY CUT F</u>					
Junction Lt'd. Buoy	47.06✓	31.40✓	36✓	71H✓	May 5
Lt'd. Bell Buoy 8F	47.06✓	31.21✓	36✓	58H✓	"
<u>PINELLAS PT. CHAN.</u>					
Buoy 5	42.56✓	36.65✓	23✓	36d✓	May 1
Lt'd. Buoy 6	42.52✓	36.57✓	20✓	35d✓	"
Buoy 3	41.75✓	36.61✓	13✓	22e✓	May 2
Buoy 2	40.93✓	36.52✓	16✓	2b✓	Apr. 29

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
TAMPA DISTRICT OFFICE
P O Box 190 Tampa 1 Florida

24 October 1960

To: Norfolk District Office
Coast and Geodetic Survey
102 W. Olney Road
Norfolk 10, Va.

Subject: Geographic Positions - Tampa Bay, Florida

Reference: (1) Your letter to Director JCE: smh dated 12 Oct. 1960
(2) Director's letter to Tampa, 6110/fra dated 20 Oct. 1960

It is believed that the SOSBEE Survey Report of 1958 is in error as only one station listed in reference letter (1) was located by triangulation. (MACDILL AFB HOSPITAL WATER TANK 1955 (not 1958)). Position is enclosed and this tank is still in same position as 1955.

FUTURE REAR & FRONT RANGE LIGHTS, CHANNEL CUT "A" fell outside the limits of our photogrammetric surveys and they were probably located on the boat sheet by sextant fix. Later in 1959 when masonry structures were built, we located them by triangulation (positions enclosed) however they are probably not in the same position as the SOSBEE used in sounding.

✓
O No RT NORTH RADIO TOWER (WSUN) 1951 (TOPO.)
27° 52' 39.30" (1209.7 m.)
82 35 21.17 (743.3 m.) Pos. checked by Radial Plot 1957

✓
O Rad RADIO MAST (STEEL) WTSP 1951 (TOPO.)
27° 52' 15.30" (471 m.)
82 37 03.11 (85 m.) Pos. checked by Radial Plot 1957

✓
O PIN ST. PETERSBURG HARBOR, PT. PINELLAS CHAN. LIGHT NO. 1 1957 (TOPO.)
27° 40' 57.233" (1761.7 m.)
82 36 34.529 (946.3 m.)

✓
O Zoo ST. PETERSBURG HARBOR, PT. PINELLAS CHAN. LIGHT NO. 4 1957 (TOPO.)
27° 41' 42.228" (1299.8 m.)
82 36 32.600 (893.2 m.)

Please advise if this does not clarify your questions.

WAR/o
Encl.
cc: The Director

William R. Kachel
LCDR, CGCS
Tampa District Officer

NORFOLK PROCESSING OFFICE
ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8429 (So-2358)

GENERAL

This appears to be an excellent basic survey. Soundings are in good agreement at crossings and development is adequate for the delineation of channels and shoal areas. See review.

DISCREPANCIES

According to ^{§ paragraph "L" of this report} paragraph "M" of the descriptive report for H-8428 (So-2258), stations LOG and GEM were located by theodolite cuts by Tampa Office. However, neither Tampa Office nor Division of Geodesy were able to furnish positions for these ranges.

Station GEM was transferred from compilation T-10565 as a photogrammetric feature. Station LOG was transferred directly from the boat sheet. No perceptible jumps were noted when plotting on either station. These ranges are believed to be of a temporary nature as permanent markers have since been established and located by triangulation.

Position adequately determined and applied to Smooth Sheet during verification
Position 107K, vol. 5, Sosbee, was not smooth plotted. This position is supposed to locate the sunken dredge charted at Lat. 27-45.3' and Long. 82-31.2'. The fix is weak, check angles do not check, and the location as given does not agree with other data. Locations as given on the boat sheet, descriptive report, chart, positions 60 to 61 & 63G, vol. 3, are all different.

CHART COMPARISONS

SHOALS NOT CHARTED

<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>DEPTH</u>	<u>POSITION NO.</u>
27-47.94 ✓	82-31.49 ✓	11' ✓	56m (purple)
47.10 ✓	32.11 ✓	30.4' ✓	28K (blue) Falls inside channel limits
41.60 ✓	34.53 ✓	17' ✓	98-99D (blue) (cut 6) Charted from Boat sheet
41.30 ✓	36.33 ✓	10.4' ✓	30-31b (purple) " " " "
41.25 ✓	35.90	12.4' ✓	29-30b (purple) " " " "

CHARTED - NOT FOUND

27-47.54 82-30.61 13' * Shoalest sd'g. in area is 22'
27-46.49 82-32.65 - wreck not located subsequent to present survey.
Charted shoal along E. side of Cut C chan. See Review.

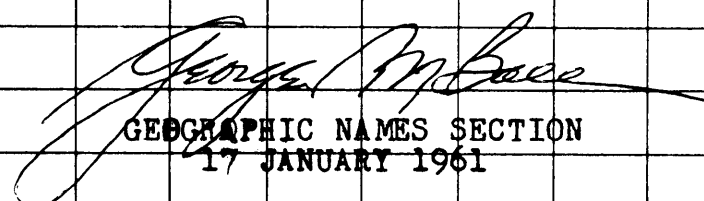
Norfolk, Va.
5 Jan. 1961

* From Bp 58183 (1959) subsequent to present survey. See Review.
Respectfully submitted,
Hugh L. Proffitt
Hugh L. Proffitt
Cartographer

GEOGRAPHIC NAMES

Survey No. H-8429

Name on Survey	<div style="display: flex; justify-content: space-between;"> <div>On Chart No. 586</div> <div>On previous survey No.</div> <div>On U. S. quadrangle Maps</div> <div>From local information</div> <div>On local Maps</div> <div>P. O. Guide or Map</div> <div>Rand McNally Atlas</div> <div>U. S. Light List</div> </div>										K B&N
	A	B	C	D	E	F	G	H	K		
Camp Key	x										1
Cockroach Bay	x								x		2
Lewis Island	x										3
Little Cockroach Bay	x								x		4
Piney Point	x										5
Point Pinellas	x										6
St. Petersburg	x								x		7
Tampa Bay	x										8
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 GEOGRAPHIC NAMES SECTION
 17 JANUARY 1961

OFFICE OF CARTOGRAPHY

REVIEW SECTION -- NAUTICAL CHART DIVISION

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8429

FIELD NO. SO-2358

Florida, West Coast, North-Tampa Bay

SURVEYED: April-May 1958 and August-September 1958

SCALE: 1:20,000

PROJECT NO. CS-402

SOUNDINGS: EDO Depth Recorder
808 Depth Recorder
Sounding Pole
Hand lead.

CONTROL: Sextant Angles
on fixed objects
Shoran Control
Estimated distances to shore features.

Chief of Party-----J. B. Watkins
R. C. Darling
Surveyed by-----A. M. Cook
J. B. Watkins
B. S. Woodruff
Protracted by-----A. G. Atwill
Soundings plotted by-----A. G. Atwill
Verified and inked by-----J. C. Chambers
Reviewed by-----E. E. Thomas
Inspected by-----R. H. Carstens

Date: 10/24/62

1. Description of the Area

This survey develops the central offshore portion of Tampa Bay, and the inshore area from Piney Point to Little Cockroach Bay on the southeastern side of the Bay.

The bottom configuration is fairly even except in the vicinity of the maintained channels, where extensive irregularity of the bottom is attributed to dredging and dumping of spoil. Shoal flats extend as much as 0.8 mile off the shore on the east side of the bay.

2. Control and Shoreline

The source of the control is adequately described in the Descriptive Report.

The shoreline originates with reviewed photogrammetric surveys T-10554, T-10555, T-10556, T-10558, T-10560, T-10561, T-10562, and T-10565 of 1957.

3. Hydrography

- a. Depths at the crossings are in good agreement.
- b. The usual depth curves are adequately delineated.
- c. The 3-ft. curve was added to delineate the extent of the inshore shoal areas.
- d. Some shoal peaks such as the 10-ft. depth in lat. $27^{\circ}45.8$, long. $82^{\circ}30.5$, the 11-ft. in lat. $27^{\circ}46.6$, long. $82^{\circ}30.2$, and the 12-ft. in lat. $27^{\circ}41.2$, long. $82^{\circ}35.9$ are undeveloped shoal peaks in 17-18 ft. depths.

Dredging for shells which was in progress may have caused these and such dredging will continue to change the bottom.

4. Condition of Survey

The field plotting, sounding records, and Descriptive Report adequately conform to the requirements of the Hydrographic Manual.

5. Junctions

An adequate junction was effected with H-8245 (1958) on the north; with H-8430 (1958) on the east; H-7970 (1952) on the wouthwest and H-8426 (1958) on the west.

The junction with surveys H-8411 (1957-58) on the northeast and H-8428 (1958) on the south will be considered in the reviews of those surveys.

6. Comparison with Prior Surveys

A. H-1235a (1874) 1/20,000	B. H-4563 (1926) 1/20,000
H-1235b (1874-83) 1/20,000	H-4565 (1926) 1/20,000
H-1273 (1875) 1/20,000	H-4584 (1926) 1/30,000

These surveys taken together comprise the earliest coverage of the area for comparison with the present survey.

1. Those surveys listed in section A are prior to any alterations from dredging or spoiling created by the Federal Channel Project in 1899. In other than dredged or spoil areas prior depths differ by only 1 or 2 ft. with present depths.
2. Those listed in section B represent the more recent prior coverage for comparative study. Except in dredged or spoil areas there has been only random shoaling of 1 to 2 ft.
- C. The low-water bars charted in lat. $27^{\circ}38.75'$, long. $82^{\circ}33.5'$ to lat. $27^{\circ}40.35'$, long $82^{\circ}32.5'$ from T-5841 of 1941 were not disproved by the present survey and are carried forward.

The present survey is adequate to supersede these prior surveys within the common area.

D. Field Examination No. 1 of 1955 1/5,000

A comparison of the present survey with this large-scale survey indicates that some shoaling has occurred along the edges of the channel. Because of the difference in scale and the different method of obtaining horizontal positions on the two surveys, a more detailed comparison would be of little value.

7. Comparison with Charts 586 (latest print date 7/2/62)
587 (latest print date 5/14/62)

A. Hydrography

The charted hydrography originates principally with the previously discussed surveys, supplemented by partial application of the present survey prior to verification and review. Charted hydrographic information in the vicinity of the Federal Channel Projects is principally through the Corps of Engineer Surveys from 1929 to 1957.

1. The low-water bar charted in lat. $27^{\circ}42.2$ long. $82^{\circ}31.5'$ originates with the boat sheet of the present survey (Bp 57517) and was subsequently revised in extent on the smooth sheet.
2. The wreck (10 ft. rep.) in lat $27^{\circ}46.5'$ long. $82^{\circ}32.65'$ is charted from N.M. 2 of 1960 and is subsequent to the present survey.
3. The obstruction charted in lat. $27^{\circ}39.0'$ long. $82^{\circ}35.5'$ from chart letter 233 of 1959 and chart letter 261 of 1959 is subsequent to the present survey. *has been removed, N.M. 5/63*
4. Specific attention is directed to the following Corps of Engineer Surveys which contain hydrographic information considered supplemented to the present survey:

- a. Bps 53414-20 (1955)
54532-34 (1956)
55203-07 (1956057)
56352-54 (1957)
56961-63 (1957-58)

The irregularity of the bottom which exists between the active spoil areas and the maintained channels results from spoiling prior to 1940. The present survey development within this area was intended only to provide adequate junctions with the Corps of Engineers Surveys. The least depths from the above and following surveys should be used as noted to supplement the present hydrography for charting.

- b. Bp. 58183 (1959)
59594-95 (1959)
60011 (1960)
61942-45 (1961)
62737 (1962)
62787-94 (1962)

Charted information from the above surveys is subsequent to present survey information.

- c. Bp. 34723-25 (approximate year 1940)

Soundings	Latitude	Longitude
13-ft.	27°44.47'	82°31.52'
17-ft	27°44.68'	82°31.4'
1-ft	27°48.5'	82°34.17'

These prior charted depths are not considered adequately developed or disproved by the present survey and should be retained as charted.

The present survey is adequate to supersede the charted hydrography, except in those specific areas noted above.

B. Dredged Channels

1. Generally, the charted controlling depths for the Federal Project Cut "B" through "J", and a portion of Gadsen Pt. Cut originates with information subsequent to the present survey. However, controlling depths in Cuts B, D, and E are from 1956-57 (Bp 55203-07) Corps of Engineers Survey information.
2. The North-south channel (St. Petersburg Harbor Entrance Channel) charted from Letter 325 of 1939 (Bp 33234) has been reported inactive (chart letter 280 of 1958) and no dredging has been reported subsequent to 1940. The present survey indicates some shoaling has occurred within the charted channel limits. However, the position accuracy of the present hydrography in the channel is not considered adequate to invalidate the latest survey by the Corps of Engineers (Bp 53760 of 1956).

C. Aids to Navigation

1. The charted aids adequately mark the features intended.
2. The landmark (HO. CHY.) charted in lat. $27^{\circ}38.99'$, long. $82^{\circ}33.05'$ originates with information prior to 1926 and is not substantiated by surveys of the bureau, subsequent to that date. The feature should be deleted from the chart.

8. Compliance with Instructions

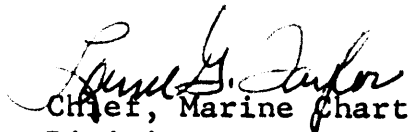
The survey adequately complies with project instructions.


9. Additional Field Work

This survey is considered to be an adequate basic survey and no additional hydrography is necessary. Should wire-drag operations be conducted in the area, clearances would be desirable over the following soundings.

- | | | | | |
|----|----------------|-----------|-------|-----------|
| a. | 12 ft. in lat. | 27°41.25' | long. | 82°35.9' |
| b. | 15 ft. in | 27°44.35' | | 82°31.96' |
| c. | 10 ft. in | 27°46.33' | | 82°30.35' |
| d. | 11 ft. in | 27°46.6' | | 82°30.31' |
| e. | 11 ft. in | 27°45.9' | | 82°30.8' |

Examined and Approved:


Chief, Marine Chart
Division


Associate Director,
Hydrography and Oceanography

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ...8429..

Records accompanying survey: Smooth sheets ...1...;
 boat sheets ...1...; sounding vols. ...14...; wire drag vols.;
 Descriptive Reports ...1...; graphic recorder envelopes ...15...;
 special reports, etc. .1-Beat sheet overlay and 2 Chart prints.

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	3017
Number of positions checked	312
Number of positions revised	0
Number of soundings revised (refers to depth only)	20
Number of soundings erroneously spaced	0
Number of signals erroneously plotted or transferred	0
Topographic details	Time 8 h 15
Junctions	Time 32 h 15
Verification of soundings from graphic record	Time 4 h 15
Special adjustments	Time 4 h 15

Verification by *J. C. Chambers* Total time 329 h. Date Sept. 21, 1962

Reviewed by *E. E. Thomas* Time 81 Date 10/24/63

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys~~

24 January 1961

Division of Charts: R. H. Carstens

Plane of reference approved in
14 volumes of sounding records for

HYDROGRAPHIC SHEET 8429

Locality Tampa Bay, West, Florida

Chief of Party: W. D. Barbee-J. B. Watkins-M. J. Tonkel (1958)

Plane of reference is mean low water reading.

- 1.5 ft. on tide staff at Pinellas Point
- 2.6 ft. ~~below B.M.~~ Shell Point
- 7.6 ft. below B.M. 1 (1952) Point Pinellas
- 11.2 ft. below B.M. 1 (1957) Shell Point

Height of mean high water above plane of reference is:

1.2 ft. Point Pinellas

1.4 ft. Shell Point

Condition of records satisfactory except as noted below:

J. M. Symons
Acting Chief, Tides and Currents Branch

~~Chief, Division of Tides and Currents~~

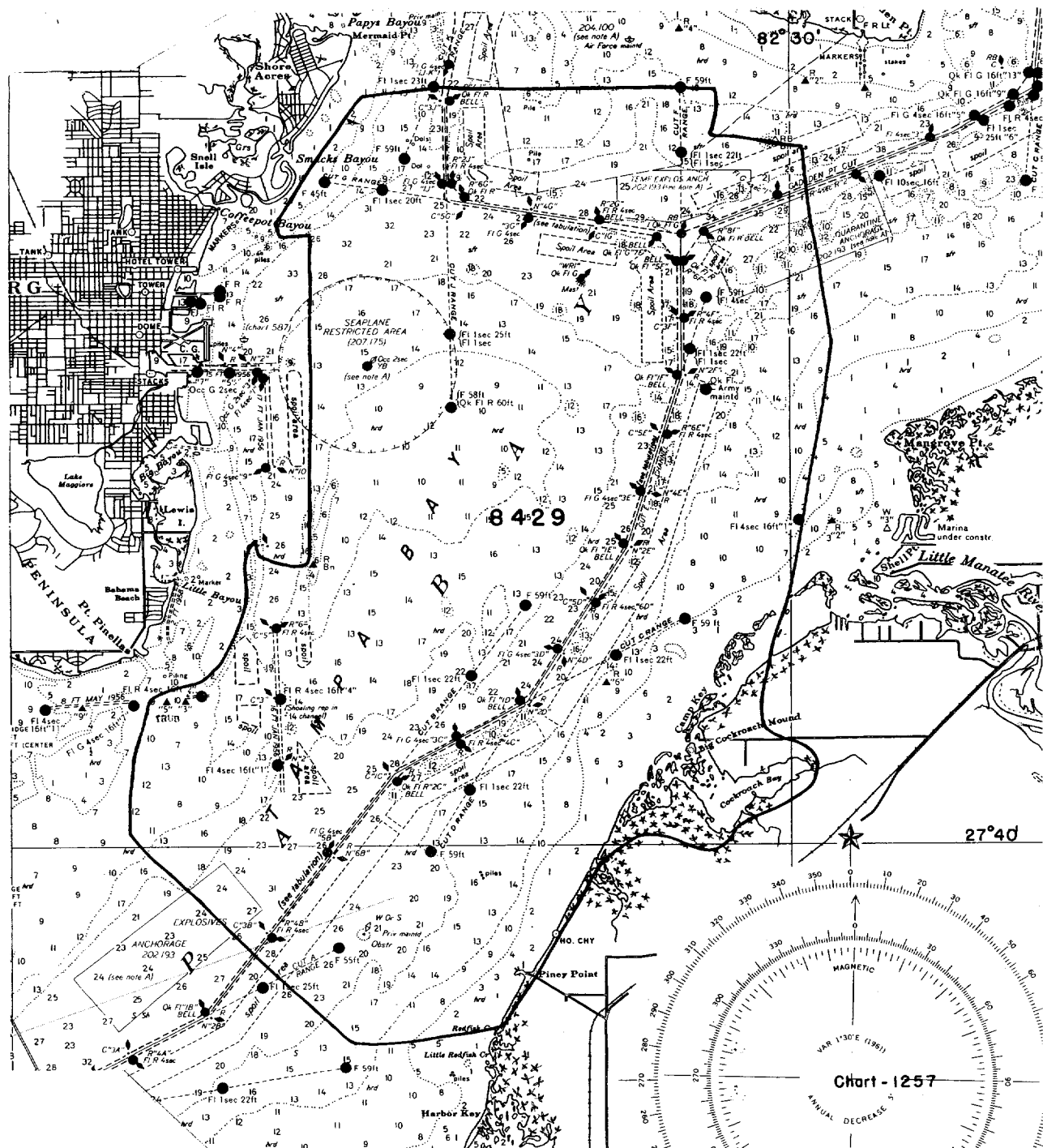


Chart - 1257

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8429

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
1-28-61	587	27m. Albert	<i>add some sdgs & piles</i> Before After Verification and Review
3/11/61	1257	<i>W. Evans</i>	Before After Verification and Review <i>Critical Corr'ns ONLY</i>
8 Nov 61	586	<i>Tuehols</i>	Before After Verification and Review <i>Added 3-foot</i>
27 Feb 62	1257	"	<i>Depth contour - minor critical corrections</i> Before After Verification and Review <i>Thru 586</i>
27 Nov 62	586	"	<i>to reflect changes.</i> Before After Verification and Review <i>Complete.</i>
25 MAR 63	587	<i>V.C. Smith</i>	Before After Verification and Review <i>Complete</i> <i>Part. Thru Dwg. Cht. 586</i>
6-14-63	1257	<i>John P. Wei</i>	Before After Verification and Review <i>Complete, thru</i> <i>Chart 587 drawing #30 and Chart 586 drawing #27</i>
5-1-67	587	<i>Hobbsdon Radden</i>	Before After Verification and Review <i>changed 10'</i> <i>sdg to 20' sdg.</i>
11/3/70	587	<i>James Sched</i>	Before After Verification and Review <i>compared overlaps</i> <i>brought overlaps into agreement 586-587</i> Before After Verification and Review

M-2168.1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.